



A.D. 1875, 23rd DECEMBER. N° 4472.

Ambulance Wheeled Litter.

LETTERS PATENT to William George Nicholas Manley, Surgeon-Major in the Royal Artillery, of 17, Chatham Place, Woolwich, in the County of Kent, for the Invention of “**AN IMPROVED AMBULANCE WHEELED LITTER.**”

Sealed the 28th March 1876, and dated the 23rd December 1875.

PROVISIONAL SPECIFICATION left by the said William George Nicholas Manley at the Office of the Commissioners of Patents, with his Petition, on the 23rd December 1875.

I, WILLIAM GEORGE NICHOLAS MANLEY, Surgeon-Major in the
5 Royal Artillery, of 17, Chatham Place, Woolwich, in the County of Kent, do hereby declare the nature of the said Invention for “**AN IMPROVED AMBULANCE WHEELED LITTER,**” to be as follows :—

This Invention consists of improvements in litters known as “Neuss’s litters,” and has for its object greater simplicity of construction, ease
10 for the invalid, and lightness of carriage. This improved ambulance

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wheeled litter is constructed with a canvass head and stretcher mounted on a suitable frame, and is made so as to be lifted off the wheels at pleasure. There are separate under parts with angle iron frame to carry the stretcher, with the necessary hinged fixtures and appliances. This improved litter is mounted on three wheels, the front one to act 5 as a guide. The litter rests on elliptical springs, which are placed at the hind part of the litter, furnished with india-rubber ends, and a spiral spring is placed at the fore part. In lieu of the front wheel an iron prop may be used if desired.

Attached to the stretcher is an arrangement of straps, one pair to 10 confine the shoulders, one pair for thighs, one pair for the hands and arms, and one pair for the feet, and at the head of the stretcher is a receptacle locker and door. The stretcher is also furnished with short legs to be used when taken off the wheels and placed on the ground. The wheels may be locked by a forked arrangement on the joint when 15 the stretcher is taken off the wheels.

It is obvious from the foregoing that this Invention is applicable to police purposes as well as in the actual operations of war.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said William George Nicholas Manley in the Great Seal 20 Patent Office on the 19th June 1876.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, WILLIAM GEORGE NICHOLAS MANLEY, Surgeon-Major in the Royal Artillery, of 17, Chatham Place, Woolwich, in the County of Kent, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her 25 Letters Patent, bearing date the Twenty-third day of December, in the year of our Lord One thousand eight hundred and seventy-five, in the thirty-ninth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said William George Nicholas Manley, Her special licence that I, the said William George Nicholas 30 Manley, my executors, administrators, and assigns, or such others as I, the said William George Nicholas Manley, my executors, adminis-

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trators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel
5 Islands, and Isle of Man, an Invention for “AN IMPROVED AMBULANCE WHEELED LITTER,” upon the condition (amongst others) that I, the said William George Nicholas Manley, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the
10 said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said William George Nicholas Manley,
15 do hereby declare the nature of my said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement and accompanying Drawings, that is to say:—

This Invention consists of improvements in litters known as “Neuss’s
20 litters,” and has for its object greater simplicity of construction, ease for the invalid, and lightness of carriage. This improved ambulance wheeled litter is constructed with a canvas head and stretcher mounted on a suitable frame, and is made so as to be lifted off the wheels at pleasure. There are separate under parts with angle iron frame to
25 carry the stretcher, with the necessary hinged fixtures and appliances. This improved litter is sometimes mounted on three wheels, the front one to act as a guide. The litter rests on elliptical springs, which are placed at the hind part of the litter, and when a front wheel is used then it is furnished with a spiral spring at the fore part. In lieu of
30 the front wheel an iron prop, hereafter described may be used if desired.

Attached to the stretcher is an arrangement of straps, one pair to confine the shoulders, one pair for thighs, one pair for the hands and arms, and one pair for the feet, and at the head of the stretcher is a
35 receptacle locker and door. The stretcher is also furnished with short legs to be used when taken off the wheels and placed on the ground.

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The wheels may be locked by a forked arrangement on the joint when the stretcher is taken off the wheels.

It is obvious from the foregoing that this Invention is applicable to police purposes as well as in the actual operations of war.

And in order that my said improvements may be understood I will 5 proceed to describe the same with reference to the annexed Drawings, the same letters of reference indicating similar parts in all the Figures.

DESCRIPTION OF THE DRAWINGS.

Fig. 1 is a perspective view of the improved ambulance wheeled litter, and shews the stretcher mounted on the under wheeled carriage, 10 and in that condition it would be when travelling; Fig. 2 is a perspective view of the same with the stretcher removed from the under wheeled carriage, and shows the former in the condition it would be when carried separate from the under carriage.

Fig. 3 shews a perspective view of under carriage when the stretcher 15 is removed, with front legs and stays.

Fig. 4 is a side elevation of stretcher.

Fig. 5 is a side elevation of under carriage with front wheel.

In Figs. 1, 2, and 4, *a* is the folding canvas hood; the hood is shewn in Figures 1 and 4 in that position it occupies when drawn over the 20 head and shoulders of the occupant, so as to form a protection against sun or rain, without preventing the free access of air; Fig. 2 shews the hood folded up when not in use. The straps for keeping the hood in its extended condition are shewn at *b, b*, Figs. 1 and 4.

In Fig. 4, *c, c, c, c*, are straps for confining the occupant when it is 25 wished to do so. As before mentioned there are one pair of straps for the shoulders, one pair for thighs, one pair for the hands and arms, and one pair for the feet. The space in the stretcher under the head and shoulders of the occupant is utilized by being formed into a receptacle or locker with a door at the back, as shewn at *c¹*, in which refreshments, 30 clothing, accoutrements or other appurtenances may be carried.

In Figures 1, 2, and 4, *d, d*, are the iron legs when the stretcher is used separate from the under carriage; *e, e*, on Figs. 1, 2, and 4, are

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keepers or buttons on the stretcher for receiving the fastenings *f, f*, shewn in Figures 3 and 5, on the under carriage, and thus securing the two together; *k*, in Figures 1, 2, and 4, is the foot piece of the stretcher.

- 5 Fig. 5 shews the arrangement of under carriage with three wheels, and Figure 3 an arrangement when legs are used in place of front wheel.

In Figure 5 *l* is the front guide wheel, and *m, m*, are the hind wheels. The hind wheels may be locked by a forked arrangement on the hinged
10 fixtures when the stretcher is taken off this under carriage. The litter rests on elliptical springs, *n, n*, Figure 5, which are placed on the hind part of the under carriage.

Having thus described the general arrangements and construction of the said ambulance litter, I would observe in conclusion that I do not
15 claim any portion of Fig. 1 separate and apart from the other, save as hereafter particularly mentioned, but that what I do claim and desire to be secured to me by the herein-before in part recited Letters Patent is,—

1st. The general arrangement and combination of parts shewn
20 together in Fig. 1 of the Drawings and herein-before described, or any mere modification thereof.

2nd. The angle iron frame or under carriage *q* on which the stretcher rests, by means of which and the hinged fixtures attached to it the stretcher can be fixed or detached from the wheels and springs.

25 3rd. The iron hinged fixtures on the frame or under carriage *q* at the sides and on the foot piece of the frame, as particularly shewn in Fig. 3.

4th. The arrangement of the straps for restraining the violent, as before described and shewn in Fig. 4, *c, c, c, c*.

30 5th. The canvass floor and foot piece *k* of the stretcher, as before described and shewn in Figs. 1, 2, and 4.

6th. The iron legs and stays to the frame or under carriage, and the head prop, as improved and modified, of the stretcher, as described and shown on Drawings, Figs. 1 and 3.

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7th. The iron legs *d* of the stretcher, as shewn on Figs. 1, 2, and 4, and herein-before described.

And, lastly. The improved receptacle under the head of the stretcher, before described and shewn on Drawings *c*¹.

In witness whereof, I, the said William George Nicholas Manley, 5 have hereunto set my hand and seal, this Nineteenth day of June, in the year of our Lord One thousand eight hundred and seventy-six.

WILLIAM GEORGE NICHOLAS MANLEY. (L.S.)

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1876.

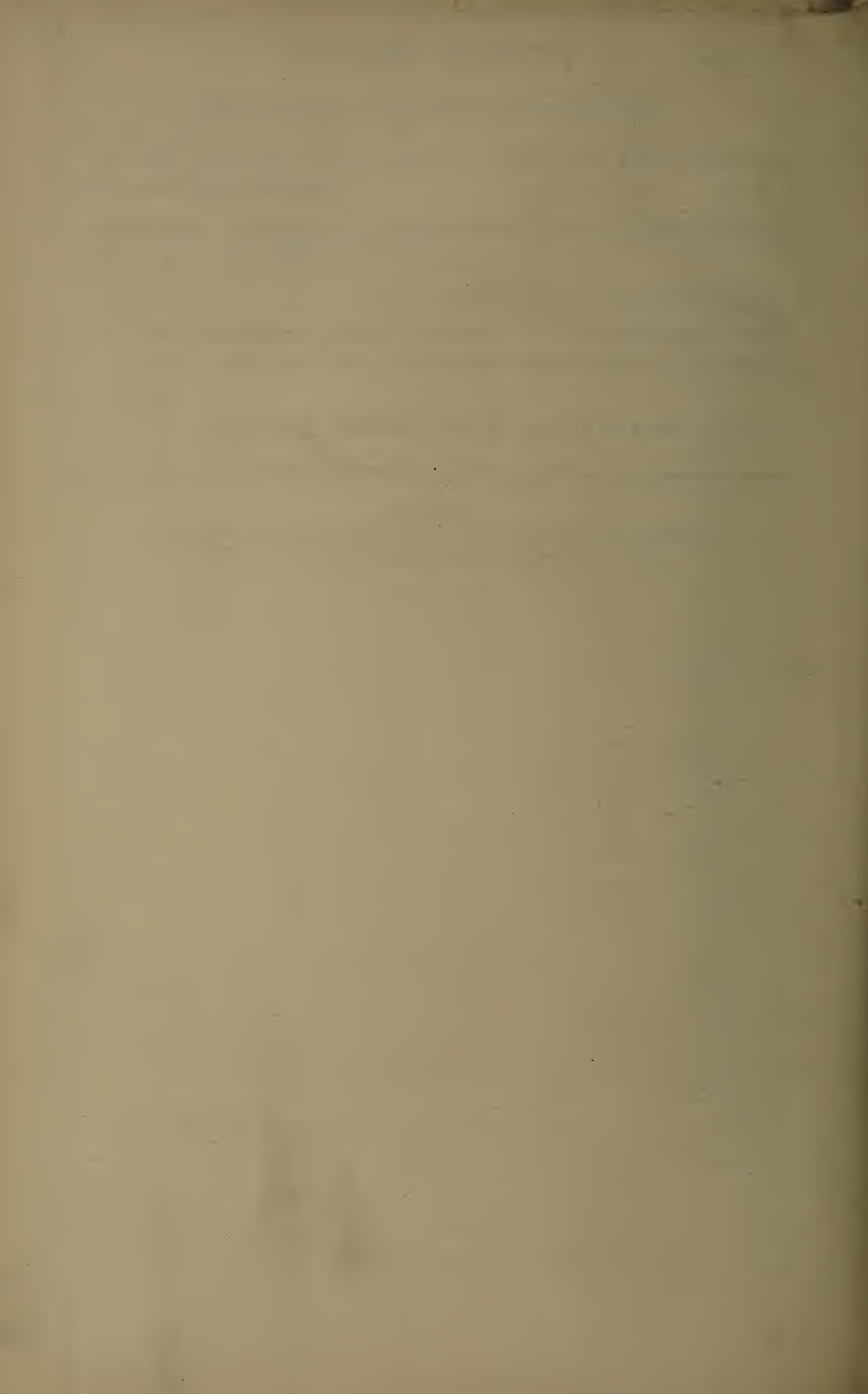


FIG. 1.

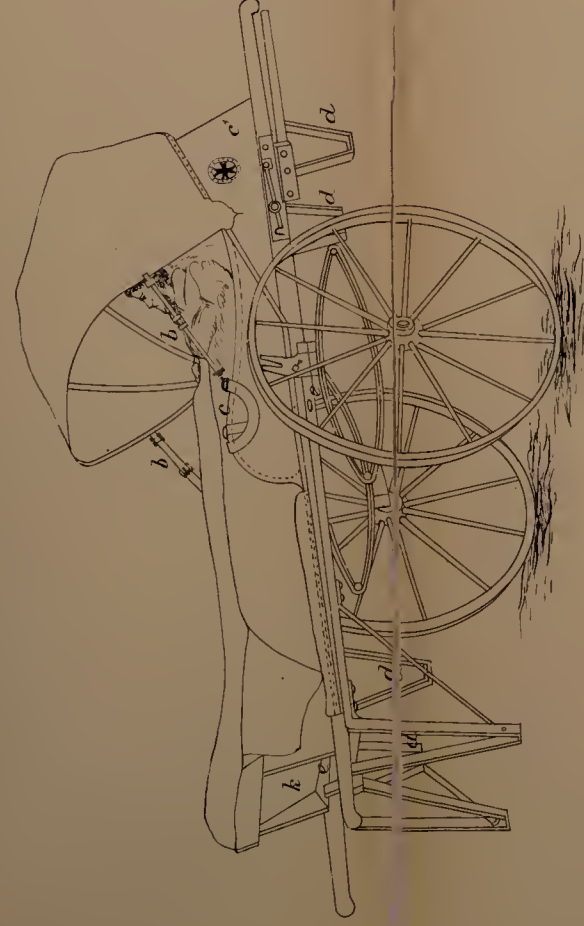


FIG. 2.

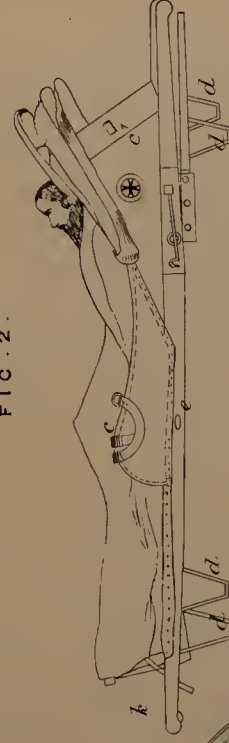


FIG. 3.

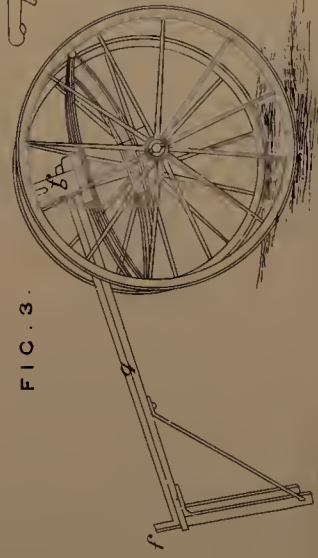


FIG. 4.

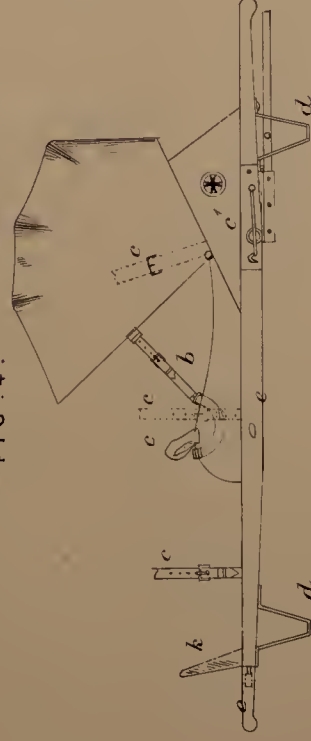


FIG. 5.

